

**Abstract**

The invention relates to methods and products for analyzing polymers. The polymers are analyzed by reconstructing sequence information from population data sets. The data sets include information about polymer dependent impulses arising from the polymers. The invention is also a method for linearly analyzing polymers by assessing the intensity of a signal arising from the polymer. The signal is generated as units and/or units specific markers pass a fixed station. The quantitative intensity of the signal is proportional to the number of units and/or unit specific markers giving rise to the signal.

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